

## Abstract

A significant number of rescue workers are killed or injured each year as they conduct searches within damaged or burning structures, unaware that the structure is in imminent danger of collapse. The present invention provides a system and method for detecting and monitoring structural damages which are irreversible and which lead to inevitable collapse of a building or structure. The system includes at least one accelerometer that is housed in a device that is mounted on an exterior surface outside the burn area, and within the reach of the rescue worker. The device communicates with a remote display that provides visual and/or audible signals to indicate imminent collapse of the structure.